# Appendix C – Action Plan

Project number: Dated: 11/08/2014

## Hertfordshire Watford / St Albans SWMP Action Plan

Item	Туре	Action	Reason/What is needed for this?	Path	Priority	Start Date	Completion Date	Lead Partner
1	Policy	Continue to enforce existing policies and provide education for updated policies	Ensuring planning officers are aware of on-going changes in national and local policy. Ensure lines of communication and roles & responsibilities	Critical	н	On-going	On-going	HCC
2	Policy	Avoid new development in high risk areas for all sources in accordance with NPPF	are clear  Co-ordinated approach between the EA and HCC, the LPA's and borough flooding and drainage departments	Critical	н	On-going	On-going	HCC/EA
3	Policy	Prepare new policies that refine and enhance the proposals set out in the National Planning Policy Framework on flood Risk. Specifically with relation to the sequential and exception tests and defining major and minor development	Co-ordinated approach between the EA, HCC flood risk and LPAs. This should be included in the LFRMS or updated SFRA	Critical	Н	On-going	On-going	HCC
4	Partners	Continue partnership working	Maintain communication between partners and stakeholders and ensure that meetings are held with all partners present at least quarterly	Critical	н	On-going	On-going	All
5	HCC	Inform planners of areas vulnerable to surface water flooding	Ensure the LPAs are using the latest GIS flood map layers and on-going advice to aid development planning decisions	Critical	Н	SWMP Issue	On-going	HCC
6	HCC	Investigate flooding incidents in accordance with Flood & Water Management Act (2010)	A suitable procedure should be developed for investigating and recording flood incidents, preferably within GIS	Critical	Н	On-going	On-going	HCC
7	Maintenance		HCC to establish a risk matrix to enable survey's to be undertaken to ensure suitable maintenance regimes can be put in place	Critical	М	On-going	On-going	HCC
8	Maintenance	Continue existing maintenance/inspection regimes giving consideration to developing targeted maintenance schedules on assets and coordinate efforts with particular regard to sewers and ordinary water courses	The existing maintenance/inspection regimes to be assessed based on previous flood incidents. A targeted regime has been developed based upon the existing understanding and modelled risk.	Critical	Н	On-going	On-going	All
9	Partners	Review and update SWMP as required	SWMP to be continuously reviewed, especially after a flood event or when new information is available	Critical	М	On-going	2017	HCC
10	Policy	Promote SUDS in new development	Encourage developers to install high quality SUDS in new development.	Critical	н	On-going	On-going	HCC
11	Partners	Measures should be in place to ensure early discussions between all partners when considering potential schemes to maximinise the	This will ensure multiple outcomes, reduce disruption to the public and where possible ensure that the schemes are financially viable to all partners	Critical	н	On-going	On-going	All
12	Policy	opportiunities for cross working/funding to maximise flood mitigation Measures should be in place to ensure that Surface Water Flooding is given the same consideration as fluvial flooding during the planning process	This will minimise the risk to new developments and third parties and ensure that the potential for future mitigation/attenuation measures at HCC expense are minimised	Critical	н	On-going	On-going	HCC
13	Policy	Undertake a Local Strategy for Flood Risk Management	This will ensure that HCC is best prepared for any future flood events	Critical	н	On-going	On-going	HCC
14	Policy	Undertake a Strategic Environmental Assessment as part of the Local Strategy for Flood Risk Management	This will ensure that no adverse environmental impacts occur as a result of flooding or the implementation of measures to reduce flood risk	Critical	н	On-going	On-going	нсс
15	Partners	Work with TW to ensure adoption policies are in place for all SUDs/drainage features	Ensure measures in in place for the future adoption of SuDS with partners input.	Critical	Н	On-going	On-going	HCC
16	HCC	Maintenance of a register of structures or features which have a significant effect on flood risk	A register should be produced and maintained of the all the structures which	Critical	М	On-going	On-going	HCC
17	нсс	FRA Review	HCC have a draft SuDS Design Guide and for the approval authority to use this as a basis for reviewing FRAs for development sites. This is to ensure that there is no increase in flood risk to the development sites or third party land, particularly from non fluvial sources which are not assessed by the EA.	Critical	н	On-going	On-going	HCC / WBC/ SADC
18	Partners	Ensure all works comply with WFD	HCC need to ensure that all works permitted or directly undertaken comply with the WFD requirements to avoid the potential for significant fines from EA/Defra/EC.	Critical	н	On-going	On-going	HCC
19	HCC	Input into Neighbourhood Plan	It is expected that the discussions on the most appropriate type of drainage for the area will be conducted at the outset, during the development of a Neighbourhood Plan. As it is considered that this approach supports the presumption in favour of sustainable development.	Critical	М	On-going	On-going	нсс
20	HCC	SuDS Register	It is recommended that a register is created and maintained for the SuDS features within Hertfordshire.	Critical	L	On-going	On-going	HCC
21	HCC	Bylaws	Consideration to the creation of local bylaws. This includes ensuring that maintenance / access strips are maintained along ordinary watercourses, which is a similar approach to that adopted by the EA for Main Rivers.	Critical	L	On-going	On-going	HCC
22	HCC	Maintenance	Review the surface water flood maps against the maintenance works to ensure optional maintenance regime for road gullies within high risk areas.	Critical	н	On-going	On-going	HCC
24	Informative	Advise businesses of the flood risk and assist them in developing business continuity plans and emergency and evacuation plans	Property specific SWMP mapping, minimise the economic impacts of flooding and ensure businesses are prepared thus encouraging economic growth.	Optional	L	On-going	On-going	HCC
25	Informative	Essential and critical infrastructure protection	SWMP mapping to be used to inform infrastructure owners of the risks.	Optional	Н	On-going	On-going	HCC
26	GIS	GIS SuDS/ Drainage tool	This tool would enable the LLFA to log and monitor the progress of applications and eventually inform the maintenance schedule of adopted	Optional	М	TBC	On-going	HCC
27	HCC	Call centre flood crib sheet for council staff to enable advice to be given to the public in a flood event	SuDS.  Training of Council staff to ensure right questions are asked and information is recorded correctly and is saved on a database.	Optional	М	On-going	On-going	HCC
28	Maintenance	Implement a repair and maintenance programme on any culverted watercourses requiring these works	This will need to be targeted towards the highest risk/cost of failure of the sections identified as works needed in the survey.	Optional	н	On-going	On-going	HCC
29	Partners	Refine asset and infrastructure register and clarify ownership where required	As required under the Flood & Water Management Act (2010).	Optional	М	On-going	On-going	HCC
30	Partners	Review SWMP Action Plan	Annual review of the Action Plan to be undertaken by all partners.	Optional	н	On-going	On-going	All
31	HCC	Retrofit SUDS	Liaison with third party land owners (initially in the highest risk areas) to encourage them to retrofit SUDS. Consideration of retrofitting SUDS in public spaces in the highest risk areas to reduce the runoff rate and improve water quality.	Optional	L	On-going	On-going	HCC
32	Partners	Review of CSO operation	Work with TW to ensure that any changes to the operation of the CSO does not have a negative impact in the borough in terms of both Water Quality and Water Quantity. This will also give the opportunity to promote changes to the CSO's that are perceived to have a negative impact.	Optional	L	TBC	TBC	TW
33	Partners	Creation of a monitoring network to include Rainfall Gauges/GW monitoring/flow monitoring	This will ensure future studies can be calibrated potentially reducing construction costs. It will also provide a greater understanding of the risks across the county. Consideration should be given to the installation of these stations in schools to maximise other benefits.	Optional	L	TBC	TBC	All
34	Partners	Highly Modified Urban Waterbodies	The EA are currently identifying where mitigation/improvement works could be undertaken to improve the WFD parameters on these waterbodies, HCC has the opportunity to be involved and cross promote schemes.	Optional	L	TBC	TBC	HCC
Priority: L= Low		Glossary	Hartfordehira County Council				Funding: Partnership source	

Funding:
Partnership sources of funding would
include HCC WBC, SADC, TW, EA and
third parties (private sector). Funding
from central government via FDGiA is
also available, however this funding
(FDGiA) combined with third party.



# Watford and St Albans SWMP Action Plan - Priority Site Short Term Plan

Туре	Action	Reason/What is needed for this?	Start Date	Completion Date	Lead Partner
Partners	Borough and District Priority Site Review	Review output from SWMP and undertake additional recommendations and agree with partners if go / no go	2014	2016	HCC
Partners	Agree Funding Approach	Assess Third Party funding options, FDGiA, HCC, contributions from stakeholders or partners	2014	2016	HCC / EA
Partners	Set up project Steering Group	Co-ordinated approach between the EA, HCC, TW and Stakeholders.	2015	2017	HCC
HCC	Appoint Project Team	Partners with necessary stakeholder groups. This should include if necessary consultants.	2015	2017	HCC
нсс	Undertake further studies	Undertake modelling and further studies to fully understand surface water flooding issues at the site. Any surveys required to facilitate and future mitigation solutions or modelling are to also be undertaken (i.e. soakaway tests / topographical surveys etc.).	2015	2019	НСС
HCC	Mitigation Review	Based on the results of the further studies review mitigation options and confirm adopting authority (LLFA, HH, WBC, SADC, TW)	2015	2019	HCC
HCC	Economic Viability	Undertaken a review of the economic assessment for the updated mitigation studies	2015	2019	HCC
нсс	Supplementary Studies	Undertake any additional studies (Ecology / Site Investigations / Additional / Topographical Surveys)	2015	2019	HCC
нсс	Apply for Funding	Apply for PAR funding	2019	On-going	HCC/EA
HCC	Detailed Design	Undertake detail design of proposed mitigation and approval from HCC as LLFA and the adopting authority.	2019	On-going	HCC
HCC	Tender	Issue proposed design for Tender	2019	On-going	HCC
HCC	Appoint Contractor		2019	On-going	HCC
нсс	Construction		2019	On-going	НСС

Glossary
HCC Hertfordshire County Council

**EA** Environment Agency

TW Thames Water

LLFA Lead Local Flood Authority

FDGiA Flood Defence Grant in Aid

**HH** Hertfordshire Highways

WBC Watford Borough Council

SADC St Albans District Council



# **WSP UK Limited**

Unit 9, The Chase Hertford SG13 7NN UK

Tel: +44 (0)19 9252 6016 Fax: +44 1992 526 001 www.wspgroup.co.uk

